BOTANICAL GAZETTE.

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GILIA KENNEDYI, n. sp.—Pubescent with spreading jointed hairs; dwarf, 1–4 inches high, branching from near the base; branches strict, ascending, fastigiate-corymbose; leaves opposite, palmately 3–5 parted, the divisions filiform or acerose, 3–5 lines long; flowers scattered below and crowded on the ends of the branches, yellow; peduncles very short, a line or less in length; calyx deeply parted, the divisions with filiform green ribs and broad white- scarious margins below; lobes of the corolla obovate, erose-denticulate, thrice as long as the short (2 lines long) campanulate tube, a dark-purple crescent-shaped spot on the inside of the throat at the base of each lobe and a lighter purple ring in the lower half of the tube; filaments inserted a little above the middle of the tube, glabrous; anthers exserted; seeds with a mucilaginous coat not emitting spiral threads.

Collected for Dr. J. T. Rothrock in Kern County, California, in the spring of 1876, by Mr. William L. Kennedy, for whom it is named.—THOS. C. PORTER, *Easton, Pa.*

ILLINOIS LICHENS.—Mr. J. Wolf, of Canton, Illinois, has zealously collected the Lichens of his region for several years, and the following list is made up from the specimens sent to me. The district appears to be quite rich in earth lichens, some of which are rare and interesting, and the search for which would doubtless be profitable, and in rail lichens belonging to the genera *Lecidea* and *Biatora*, which are peculiarly subject to be modified by this substrate, and thereby rendered difficult to determine. There are also in the same habitat many small fungi which simulate lichens so closely that that they can safely be distinguished only by the microscope.

Ramalina calicaris Fr.

Cetraria ciliaris Ach.

Alectoria jubata (L.) var. *chalybeiformis* Ach.

Theloschistes parietinus (L.) Norm.
concolor (Dicks.)

Parmelia perlata (L.) Ach.
perforata (Jacq.) Ach. var. *crinita* Tuck.
tiliacea (Hoffm.) Flk.
Borreri Turn.
saxatilis (L.) Fr.
olivacea (L.) Ach.
caperata (L.) Ach.

Physcia speciosa (Wulf., Fr.) var. *hypoleuca* Ach.
stellaris (L.) Nyl.
? *cæsia* (Hoffm.) Nyl.
obscura (Ehrh.) Nyl.
aulverulenta (Ehrh) Nyl.

Pyxine cocœs, (Sw.) Nyl., var. *sorediata* Tuck.

Peltigera canina (L.) Hoffm.

Heppia Despreaurii Mont.

Pannaria molybdæa (Pers.) Tuck., var. *cronia* Nyl.
nigra (Huds.) Nyl.
byssina (Nyl.) Tuck.

Collema pycnocarpum Nyl.
cyrtaspis Tuck.
nigrescens (Huds.) Nyl.
pulposum, Bernh.
limosum (Ach.) Nyl.

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Leptogium pulchellum (Ach.) Nyl.
tremelloides (L. fil.) Fr.
chloromelum (Sw.) Nyl.
subtile Nyl.

Placodium vitellinum (Ehrh.) Hepp.
aurantiacum (Lightf.) Næg.
cerinum (Hedw.) Næg.
sideritis Tuck.
camptidium Tuck.
ferrugineum (Huds.) Hepp.

Lecanora subfusca (L.) Ach.
varia (Ehrh.) Fr.
elatina Ach., var. *ochrophæa* Tuck.
cervina (Pers.) Sommerf., var. *pruinosa* Ach.

Rinodina Ascociscana Tuck.
sophodes (Ach.) Mass.
alboatra (Hoffm.)
constans (Nyl.) Tuck.

Pertusaria velata (Turn.) Nyl.
pertusa (L.) Ach.
leioplaca (Ach.) Schær.
pustulata (Ach.) Nyl.

Conotrema urceolatum (Ach.) Tuck.

Gyalecta pineti (Schrad.) Tuck.
2 *tricialis*, n. sp.

Cladonia turgida (Ehrh.) Hoffm.
pyxidata (L.) Fr.
fimbriata (L.) Fr.
gracilis (L.) Fr.
squamosa, Hoffm.
furcata (Huds.) Fr.
mitrula Tuck.
rangiferina (L.) Hoffm.
macilenta Hoffm.
cristatella Tuck.

Biatora coarctata (Hoffm.) Fr.
? *flexuosa* Fr.
3 *russula* (Ach.) Mont.
sanguineo-atra (Fr.) Tuck.
exigua (Chaub.) Fr.
uliginosa (Schrad.) Fr.
peliaspis Tuck., ined.
4 *rudis*, n. sp.
5 *atropurpurea* (Mass.) Tuck.
6 *rubella* (Ehrh.) Rabenh.
chlorantha Tuck.
cyphalea Tuck.
geophana Nyl.
fossarum (Duf.) Mont.
resinæ Fr.

Lecidea myriocarpoides Nyl.

Buellia parasema (Ach.) Kbr.
myriocarpa (DC.) Mudd.

Opegrapha varia (Pers.) Fr.

Graphis scripta (L.) Ach.
dendritica Ach.

Arthonia pyrrhula Nyl.
lecideella Nyl.
pateilulata Nyl.
7 ? *dispersa* Nyl.
astroidea (Ach.) Nyl.
punctiformis, Ach.
spectabilis Flot.
tædiosa Nyl.

Mycoporum pycnocarpum Nyl.

Calicium roscidum (Flk.) Nyl. var. *trabinellum* Nyl., and var. *drosodes* Tuck. ined.
subtile Fr.
trachelinum Ach.

Endocarpon arboreum Schwein.
pusillum Hedw.

8 *Thelocarpon* [*Segestria*] *Laureri* Flot.

Sagedia lactea Kbr.

Verrucaria epigæa, Pers., Ach.
nigrescens Pers.
rupestris Schrad.

Pyrenula thelæna (Ach.) Tuck.
punctiformis (Ach.) Næg.
gemmata (Ach.) Næg.
leucoplaca (Wallr.) Kbr.
glabrata Ach.
nitida Ach.
lactea (Mass.) Tuck.

NOTE.—1. A curious Collemaceous plant was sent me by Mr. Wolf, which seems to be new. It occurs on the earth and when dry looks like a thin, black crust, much resembling the nostoc which occurs in similar situations. When wet it becomes brown and swells like a *Collema*, and has the internal structure of the Genus. Several specimens were sent me, but only one small one was fertile. It has small, lacanorine apothecia. The spores are simple, ovoid, about 14 thousandths of a millimetre in length. It is much to be desired that more fertile specimens should be obtained, and submitted to some competent botanist to determine. It may be near *C. myriococum* Ach.

2. This is a new species, which has only occurred before, in very small quantity, in New Bedford, Mass. It occurs on the earth, and is the smallest known Gyalecta and hardly to be detected except when the earth is moist. Additional specimens would be very acceptable. Mr. Wolf seems to have found it but once in small quantity.

3. A single specimen of this species occurred on honey locust. It is a Southern lichen, but has been found in Massachusetts.

4. A new species, which was first found in New Bedford, Mass. It has very numerous, black apothecia, and large spores. Mr. Wolf states that it is abundant.

5. The plant occurred on rails and is obscure and doubtful, but it has the spores of the species.

6. Various forms of this polymorphous species were sent. Most of them were blackened conditions on rails. Var. *inundata* occurred on rocks.

Several specimens of *Biatora* on rails remain uncertain.

7. The specimen did not furnish spores, but has the external appearance of this species, which has occurred in Massachusetts.

8. On rails. The first discovery of this pretty lichen in America is due to Mr. Wolf. It may also occur on the earth.—H. WILLEY.

CALOCHORTUS KENNEDYI, n. sp.—Stem 6–18 inches high, simple, with 3 to 4 linear leaves, the lowest much longer (6 to 8 inches) than the others; umbel 2 to 4 flowered; peduncles 2 to 6 lines long; outer segments of the perianth ovate, cuspidate or acuminate, on the outside pale green with white-scarious margins, on the inside scarlet-red, 9 to 10 lines long; inner segments broadly cuneate, bright scarlet-red, except a purple spot just above the base bearded with a few scattered hairs, 1 to 1¼ inches long; anthers lance-oblong, 3 to 4 lines long, purple; filaments triangular, about 1 line in length; capsule lanceolate, tapering upward, 1½ to 2 inches long.

The brilliant scarlet color of the perianth suggests the iodide of mercury.

Collected in Kern County, California, in the spring of 1876, by Mr. William L. Kennedy, and named in his honor at the request of Dr. J. T. Rothrock.—THOS. C. PORTER, *Easton, Pa.*

CHANGES IN BOTANICAL NOMENCLATURE.—Since the publication of the last edition of Dr. Gray's Manual of the Botany of the Northern United States, changes in the names of a number of plants contained therein have been made, and, thinking it may be of service to the many botanists who use that excellent work, I send you a list of such as have fallen under my observation.

Viola pubescens, Ait., var. *scabriuscula*, T.&G.=*V. glabella*, Nutt.—Brewer & Watson, in Bot. Calif., 1. p. 57.

Spiræa opulifolia, L.=*Neillia opulifolia*, Benth. & Hook., Gen., 1. p. 612.

Ribes hirtellum, Mx.=*R. oxycanthoides*, L.—Brewer & Watson, in Bot. Calif., 1. p. 206.

Œnothera sinuata, L., var. *humifusa*, T. & G.=*Œ. humifusa*, Nutt.—Watson, in Proc. Am. Acad., 8. p. 580.

Antennaria margaritacea, R. Br.=*Anaphalis margaritacea*, Benth. & Hook., Gen. 2. p. 303

Cirsium lanceolatum, Scop.=*Cnicus lanceolatus*, Hoffm.—Gray, in Proc. Am. Acad. 10. p. 39.

Cirsium arvense, Scop.=*Cnicus arvensis*, Hoffm.—Gray, l. c., p. 39.

Cirsium pumilum, Spreng.=*Cnicus pumilus*, Torr.—Gray, l. c., p. 40.

Cirsium horridulum, Mx.=*Cnicus horridulus*, Ph.—Gray, l c., p. 40.

Cirsium muticum, Mx.=*Cnicus muticus*, *Ph.*—Gray, l. c., p. 41.

Cirsium Virginianum, Mx.=*Cnicus Virginianus*, *Ph.*—Gray, l. c., p. 41.

Cirsium altissimum, Spreng.=*Cnicus altissimus*, Willd.—Gray, l. c., p. 42.

Cirsium discolor, Spreng.=*Cnicus discolor*, Muhl.—Gray, l. c., p. 42.

Cirsium Pitcheri, T. & G.=*Cnicus Pitcheri*, Torr.—Gray, l. c., p. 42.

Mulgedium pulchellum, Nutt.=*Lactuca pulchella*, DC.—Bot. Calif., 1. p. 442.

As Dr. Gray has followed Bentham & Hooker in merging the genus *Mulgedium* into *Lactuca*, our other species may be named thus:

Mulgedium Floridanum, DC.=*Lactuca Floridana*, Gærtn.

Mulgedium acuminatum, DC.=*Lactuca villosa*, Jacq.

Mulgedium leucophæum, DC.=*Lactuca foliosa* (*L. leucophæa*, Gray, Bot. Calif., l. c., not of Sibthorp, DC. Prod., 7. p. 136.).

Lycopus Europæus, L., var., *sessilifolius*, Gray=*L. sessilifolius*, Gray.—Proc. Am. Acad., 8. p. 285.

Lycopus Europæus, L., var. *integrifolius*, Gray=*L. rubellus*, Mœnch.—Gray, l. c., p. 286.

Lycopus Europæus, L., var. *sinuatus*, Gray=*L. sinuatus*, Ell.—Gray, l. c., p. 286.

Phlox Carolina, L., var. *ovata*, Benth.=*P. ovata*, L.—Gray, l. c., p. 249.

Phlox procumbens, Lehm.=*P. amœna*, Sims.—Gray, l. c., p. 251.

Physalis viscosa, Gray's Man.=*P. Virginica*, Mill.—Gray, Proc. Am. Acad., 10. p. 65. The true *P. viscosa* of Linn. is a southern plant, which ranges from North Carolina to Florida.

Chenopodium album, L., var. *Boscianum*, Gray=*C. Boscianum*, Moq.—Watson, in Proc. Am. Acad., 9. p. 94.

Rumex Britanica, L.=*R. altissimus*, Wood.—Gray, in Proc. Am. Acad., 8. p. 399.

Rumex orbiculatus, Gray=*R. Britannica*, L.—Gray l. c.

Chenopodium glaucum, L.=*Blitum glaucum*, Koch.—Watson, l. c., p. 101.

Polygonum aviculare, L., var. *erectum*, Roth.=*P. erectum*, L.—Watson, Am. Nat., 7. p. 664.

The following changes in the genus *Carex* are found in Olney's *Carices Boreali-Americanæ:*

Carex crus-corvi, Shuttlew.=*C. Nuttallii*, Schw.

C. retroflexa, Muhl.=*C. rosea*, Schk., var., Olney.

C. canescens, L. var. *vitilis*, Boott=*C. vitilis*, Fries.

C. arida, Schw. & Torr.=*C. Muskingumensis*, Schw.

C. cristata, Schw.=*C. lagopodioides*, Schk., var. *cristata*, Carey.

C. cristata, Schw., var. *mirabilis*, Boott=*C. lagopodioides*, Schk., var. *mirabilis*, Olney.

C. adusta, Boott=*C. alba-lutescens*, Schw.

C. fœna, Willd., var.(?) *subulonum*, Boott=*C. silicea*, Olney.—Proc. Am. Acad., 7. p. 393.

C. straminea, Schk., var. *tenèra*, Boott=*C. tenera*, Dew.

C. straminea, Schk., var. *aperta*, Boott=*C. tenera*, Dew., var. *major*, Olney.

C. straminea, Schk., var. *hyalina*, Boott=*C. straminea*, Schk., var. *Crawei*, Boott.

C. Barrattii, Schw. & Torr.=*C. littoralis*, Schw.

C. vaginata, Tausch.=*C. panicea*, L., var. *refracta*, Olney.

C. Meadii, Dew.=*C. panicea*, L., var. *Meadii*, *Olney.*

C. tetanica, Schk.=*C. panicea*, L., var. *tetanica*, Olney.

C. Crawei, Dew.=*C. microdonta*, Torr.

C. æstivalis, M. A. Curtis=*C. virescens*, Muhl., var. *æstivalis*, Olney.

C. Œderi, Ehrh.=*C. viridula*, Mx.

C. polymorpha, Muhl.=*C. panicea*, L., var. *scariosa*, Olney.

C. rotundata, Wahl.?=*C. miliaris*, Mx., var.? Olney.—THOS. C. PORTER, *Easton, Pennsylvania.*

CUSCUTA RACEMOSA.—That "new" *Cuscuta racemosa*, the Alfalfa-Dodder, was, after all, not new to Prof. Thurber and to the readers of the "American Agriculturist." By an unpardonable oversight his article in the number of December, 1874, of that journal adorned with a cut, was overlooked not only in the notice published in the "GAZETTE" of January, but also in the Flora of California, published last summer. It seems that the parasite has made its appearance in California at least three years ago on Luzerne fields and its nature and dangerous character was recognized by Prof. Thurber and the means indicated to eradicate it. The little notice of this plant in the January number of the GAZETTE has elicited the information from California that the parasite is "now well naturalized here (about San Francisco Bay), and is a great pest among the Chili clover."—G. E.

FORKING FERNS.—In the Nov. number of the GAZETTE a correspondent gives an instance of the forking of the fertile spike of *Botrychium Virginianum*, Swz. (This is the correct orthography, and it should always be so written. *B. Virginicum* is the later orthography of Willdenow, and not of Swartz.), and refers it to an injury received by

the plant when growing. I have observed the same phenomena, and apparently from the same cause, in other species, but it sometimes occurs when the plant has not received any injury. I have a specimen of *B. Virginianum* with two perfect fertile spikes, the common stalk forking just above the union with the sterile frond. The tendency to fork on the part of our ferns I have found to be quite common. I have noticed and received from correspondents, numerous specimens of the different genera and species. Some curious examples occur in *Camptosorus*, some specimens forking directly from the simply auricled base, making a double frond, and others forking from the long-attenuated tips.

In *Dicksonia* I have observed specimens in which not only the frond but the pinnæ also were forked.—GEO. E. DAVENPORT.

ASPIDIUM SPINULOSUM, SWZ.—What makes varieties? I do not know that I clearly apprehend the meaning of your correspondent who in the Nov. number inquires if his specimen of this species may not be "another of the many plants where the so-called 'varieties' are merely forms with individual instead of local peculiarities," but I have always supposed that it was individual peculiarities that made varieties. A plant that depended altogether upon local influences for its character would be very apt to run back into the normal form of the species on being removed from those local influences and such a plant I should not consider as a variety at all. If it be local pecularities that make varieties then how does it happen that all of the plants growing within the ranges of the same local influences are not always of the same character? Within an area containing at least half an acre of *Aspidium spinulosum*, in the vicinity of Boston, I find many forms of *spinulosum* all growing together and subject to the same local influences, and I fail to see how two plants of one species growing side by side, under precisely the same influences, can have two distinct forms if it is local influences alone that make their peculiarities. Rather I should say that these peculiarities came from some cause inherent in the plants themselves and that, therefore, it is individual and not local peculiarities that make varieties.—GEO. E. DAVENPORT.

PYRUS AMERICANA, DC.—This beautiful tree makes its home in central Pennsylvania near the sumit of the mountains, marking with uniformity a line of about 1,300 to 1,400 feet above tide. As you climb the steep ascent of Tussey and Bald Eagle mountains, among masses of broken rocks covered with lichens, a trio of beautiful small trees attracts your attention—*Pyrus Americana*, DC., *Betula papyracea*, Ait., with its white bark and graceful spray, and *Acer Pennsylvanicum*. These all seem to love a lofty exposure, and thrive on the scanty debris of shattered rocks. *Acer Pennsylcanicum* is often met with at lower elevations. Ascend either of these mountains in their trend to the north east through Huntingdon and Centre counties, your approach to their summit is heralded by clumps of the Birch and *Pyrus Americana*. There is, however, a marked exception to this habitat of high exposure. The *Pyrus Americana* makes a sudden descent of about 700 feet to the base of Tussey Mountain. Two miles east of Spruce Creek Station on the Pennsylvania Rail Road a small colony of a dozen bushes, dwarfed to six feet in height, is found growing over an area of a half acre of rocks. The reason for this departure from the usual elevation of the tree is found in the fact that below these rocks perpetual ice creates a cold atmosphere. This interesting locality, sheltered from the direct action of the sun by the precipitous mountain side and the erosion in it made by water action in an earlier era, has the cool, damp atmosphere of ice in the warm days of August. The ice is concealed by rocks covered with a vigorous growth of mosses, shrubs and trees, and is found [in August] some three feet below the surface.

In the same locality grows *Pinus Strobus*, L., *Abies Canadensis*, Michx., *Mitchella repens*, L., *Rubus strigosus*, Michx., *Fragaria vesca*, L., *Ribes prostratum*, L'Her., *Heuchera pubescens*, Pursh.—J. R. L.

CLAYTONIA VIRGINICA.—I was pleased to note that my remarks on *Claytonia* have led to a comparison of notes. I trust that observations of this and other plants will be made next season. Dimorphism in *Claytonia* is new to me. In *Epigæa repens*, *Mitchella* and others I have noted it, and made record there of many years ago in the *Proceedings of the Philadelphia Academy*. It would be, I think, a service to science if Mr. Wheeler would endeavor to ascertain next season how the flowers of No. 2 are fertilized? What insect, if any, visits them? And how they work as regards fertilization? It would also be worth looking at again to see whether "different stems grow from one tuber." My memory seems to say that only one stem grows from one tuber, but I may be wrong.

Albinos are not unusual in all blue flowered plants. I found a white *Brunella vulgaris* last year. Scarlet more rarely produce white flowers, but I never found a species normally white, with blue or red ones. Has anybody seen such? It seems easier to lose color than to regain it.—THOMAS MEEHAN, *Germantown, Phila.*

BOTANICAL RAMBLES IN EAST FLORIDA. (*concluded.*)—It was my great desire, at the earliest possible time, to reach the head waters of the Kissimee and the "Indian River Country," and return north with the increase of the temperature, but the unusually dry season rendered the navigation beyond this lake impracticable, which obliged me, though reluctantly, to retrace my course with the hope of reaching by rail and the Gulf a more southern latitude. Leaving the St. John's River country until July, on my homeward way, a desire to see the old Spanish town of St. Augustine led me to return. On June 30th, at Tocoi, awaiting the arrival of the cars, my leisure time was occupied in securing specimens of *Eryngium aromaticum*, Baldw., *Euphorbia telephioides*, Chapm., *Nolina Georgiana*, Michx., and *Fimbristylis stenophylla*. It was but thirty minutes ride and the quaint old town of Menendez came in view. I was impressed with its cleanly appearance, no rubbish or weeds of any kind in the long narrow streets, not even plants for botanical specimens, except, here and there, close to the walls of the houses, depauperate specimens of *Senebiera didyma*, Pers., and *Euphorbia maculata*, L., struggling for life. I had been somewhat disappointed here in my botanical prospects on account of the distance of interesting ground. After collecting in the lots *Parthenium Hysterophorus*, L., and *Alternanthera Achyrantha*, R. Br., my attention was directed to the beach and Anastasia Island, both extremely barren, yet not devoid of interest. On the former grew *Houstonia angustifolia*, Mx., *Bumelia lanuginosa*, Pers., *Gilia coronopifolia*, Pers., *Batatis littoralis*, Chois., *Atriplex arenaria*, Nutt., *Cyperus Nuttallii*, Torr., *Iva imbricata*, Walt., *Helianthus debilis*, Nutt., and *Ipomœa Acetosellafolia*. On the latter was seen *Dodonæa viscosa*, L., *Arenaria diffusa*, Ell., *Chiococca racemosa*, Jacq., *Panicum gibbum*, L., and *Frangula Caroliniana*, Gray. The last, bearing an abundance of red berries, appeared conspicuous and ornamental among the dwarfed live and water oaks. Here are the quarries of the Coquina rock of which the historical Fort Marion was built over two centuries ago.

An equable temperature is claimed for this coral state, and no doubt correctly. My thermometrical records for the 3d, 4th and 5th of July show only 85° to 88° F. in the shade, yet the rays of the mid-day sun at this season are uncomfortably hot. I considered it prudent, therefore, to retrace my course northward and close my peregrinations in this "land of flowers." However, about an hour's walk from the St. John's River, the floral display became so inviting that with an intimation to the conductor he kindly let me off. The vegetation was extremely interesting in this wild pine land and it was much to my regret that the time was so short until the arrival of my steamer for Savannah. On account of the precious hours no time was wasted in preparing specimens of *Polygala fastigiata*, Nutt., *Psoralea virgata*, Nutt., *Petalostemon carneus*, Mich., *Ludwigia linifolia*, Poir., and *sphærocarpa*, Ell., *Rhexia stricta*, Pursh., *glabella*, Michx., and *lutea*, Walt., *Helianthella tenuifolia*, T. & Gr., *Marshallia angustifolia*, Pursh., *Sabbatia macrophylla*, Hook., *chloroides*, Pursh., and *gentianoides*, Ell., *Asclepias tomentosa*, Ell., *Her-*

pestis amplexicaulis, Pursh., *Schœnolirion Elliottii*, Feay, *Juncus repens*, Michx., *Rhynchospora cephalantha*, Torr., and *fasicularis*, Nutt., *Scleria gracilis*, Ell., *Carex glaucescens*, Ell., and the handsome grass, *Ctenium Americanum*, Spreng., all of which were in a most excellent state for collecting.—DR. A. P. GARBER.

SOME PLANTS OF THE LOWER WABASH.—The following is a list of plants found in this vicinity during the past season, which are not included in my "*Catalogue of the Flora of the Lower Wabash Valley*," published in the *Geological Report of Ind.*, for 1875:

Helleborus viridis, L., Found in a fence-row, Feb., 15, in the last stage of flowering; evidently escaped from a garden near by.

Sagina apetala, L., June 10th, in bloom. Dry woods.

Psoralea melilotoides, Michx, Found in full bloom, May 3, in a low moist prairie.

Petalostemon candidus, Michx. Same locality as the last, June 10.

Desmodium rotundifolium, DC. Sandy soil; not in bloom.

Desmodium Canadense, DC. July—Sep.

Triosteum perfoliatum, L. Bottom-lands.

Lepachys pinnata, Torr. & Gray. I have observed this plant for several seasons, but until this, have always taken it to be *Rudbeckia laciniata*, L.

Dysodia chrysanthemoides, Lag. Along road-sides in considerable numbers; this appears to be a "new-comer" in our locality.

Artemisia annua, From Siberia ? Escaped from gardens; have found several specimens along road-sides during the past summer. Our amateur gardeners here call it "*Sweet Fern Plant*."

Nabalus racemosus, Hook. Moist prairie, Sep., 10.

Pedicularis Canadensis, L. April 13.—June 8.

Isanthus cæruleus, Michx. Sep. 20. The whole plant possesses an odor similar to *Monarda punctata*, L.; which I do not find mentioned in our text-books.

Lycopus Europæus, L. var.— Have found an interesting form of this exceedingly variable species this season growing on a bare *sand-stone cliff* with *Pellæa atropurpurea*, Link., which last is usually thought to be found only on calcareous rock. Leaves ovate-lanceolate, acuminate, coarsely serrate; runners from 2—6 ft. long, some of them bearing immature flowers.

Fraxinus pubescens, Lam. Low wet woods.

Quercus lyrata, Walt. This southern species was identified from imperfect specimens found several years ago; not having found it since, I had concluded that this was a mistake, and had dropped it from my catalogue of this vicinity; but this season I have discovered quite a number of trees within a few miles of *Mt. Carmel*.

Hybrid of Quercus imbricaria & Quercus falcata, Michx. During the past season I found a small fruitless oak-tree; from specimens of it sent *Dr. Engelmann* he thinks it a "*hybrid of imbricaria and probably falcata*." The leaves vary from entire to three to five falcate lobed.

Goodyera pubescens, R. Br. Rocky bluff.

Calopogon pulchellus, R. Br. Moist prairie, May 10, in full bloom.

Smilax hispida, Muhl. River-bottoms.

Vilfa aspera, Beauv. Hilly open woods.

Vilfa vaginæflora, Torr. Dry clayey hill-sides; Aug.—Oct.

Andropogon scoparius, Michx.

Andropogon Virginicus, L.

Sorghum nutans, Gray. The three last, with *A. furcatus*, Muhl. form the principal grasses of our prairies.

Azolla Caroliniana, Willd. In a "*Cypress Pond*."—J. SCHNECK, *Mt. Carmel, Ill.*

FISSIDENS DECIPIENS, De Notaris.—Mr. Rau desires me to make this correction, as I had wrongly attributed this species to Mr. Austin. It is described in the Supplement to Sullivant's *Icones Muscorum*.—A. H. Y.

RECENT PUBLICATIONS.—*American Naturalist*, December and January. In the former number is given an interesting communication from C. G. Pringle upon "Alpine and Subalpine Plants in Vermont." Many rare plants are found occurring on the Green Mountains, and Mr. Pringle thinks that the plants found there are much more alpine in character than they have heretofore been credited with being. A region is described which out-Willoughbys Willoughby itself. Among the rarer plants found are *Asplenium viride*, *Saxifraga Aizoon*, *S. aizoides*, *S. oppositifolia*, *Woodsia glabella*, *W. hyperborea*, *Calamagrostis Langsdorffii*, *Graphephorum melicoides*, and *Habenaria rotundifolia*. W. W. Bailey gives in popular language the differences between the two Bitter-Sweets *Solanum dulcamara* and *Celastrus scandens*. In the January number Dr. Gray proposes the term *heterogone* or *heterogonous* flowers for the old *dimco-dimorphism* of Torr. & Gr., Fl. N. Am., the *dimorphism* of Mr. Darwin, and the *heterostyled* flowers of Hildebrand. This term, expressing a difference in relative length or height of stamens and style, would have its counterpart in *homogone* or *homogonous* flowers to designate the absence of this kind of differentiation.

Bulletin of the Torrey Botanical Club, December. Mr. Leggett announces his intention of publishing monthly a "Calendar of Leaves," for the purpose of gathering facts on the subject of the habits of different shrubs and trees in shedding or retaining their leaves. A short account of the Torrey Herbarium and Library is given. The Herbarium numbers from seventy-five to eighty thousand species of plants made up principally by the collection of Dr. Torrey, estimated to contain 35,000 species, the Meissner Herbarium, and the Herbarium of Dr. Chapman. The Library contains about 1,300 volumes in all departments of Botany.

The *Index Seminum* of the Chicago Botanical Garden offers a fine list of seeds for exchange. H. H. Babcock, Director.

We take great pleasure in announcing that Dr. Joseph T. Rothrock, of Wilkesbarre Penn., has been unanimously elected Professor of Botany in the University of Pennsylvania. Through his experience both in field and herbarium work, he is a man well fitted for the position, and will undoubtedly reflect great credit upon himself and the institution which has done him this honor.

Having received and examined a set of Mr. Flint's Alpine plants we can cordially recommend them to our readers as being very satisfactory and at the same time very cheap. We take the following announcement from the American Naturalist:—Collections of the Alpine and sub-Alpine plants of the White Mountains, N. H., containing more than fifty species, have been made during the past season, by William F. Flint and J. H. Huntington. The number of sets is limited to fifty. They have been carefully arranged and ticketed, and will be sent by mail upon the receipt of five dollars [$5.00]. Address William F. Flint, Hanover, N. H. [Box 348.]

"MONOGRAPIÆ PHANEROGAMARUM."—M. Alphonse DeCandolle and his son, Casimir DeCandolle, are engaged upon the first volume of a work similar to the *Prodromus* which is to be entitled "*Monographiæ Phanerogamarum*." It will contain the *Smilaceæ*, by A. DeCandolle, the *Meliaceæ*, by C. DeCandolle, and other families by other writers. They will consider the families not contained in the Prodromus, or those which have need of being elaborated anew.—J. M. C.

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